

DEPARTMENT

MATHEMATICS

TITLE OF COURSE

MATHEMATICS

LEVEL

NATIONAL 5

RECOMMENDED ENTRY LEVEL

National 4 Mathematics with teacher recommendation

COURSE CONTENT

Mathematics: Expressions and Formulae (National 5)

The general aim of this Unit is to develop skills linked to mathematical expressions and formulae. These include the manipulation of abstract terms, the simplification of expressions and the evaluation of formulae. The Outcomes cover aspects of number, algebra, geometry and reasoning.

Topics include: Surds, Indices, Factorisation, Standard Form, Algebraic Fractions, Straight Line, Area and Volume, Circles

Mathematics: Relationships (National 5)

The general aim of this Unit is to develop skills linked to mathematical relationships. These include solving and manipulating equations, working with graphs and carrying out calculations on the lengths and angles of shapes. The Outcomes cover aspects of algebra, geometry, trigonometry and reasoning.

Topics include: Simultaneous Equations, Inequalities, Formulae, Quadratic Functions and Equations, Quadratic Theory, Pythagoras' Theorem, Angles, Similarity, Trigonometric Graphs and Equations.

Mathematics: Applications (National 5)

The general aim of this Unit is to develop skills linked to applications of mathematics. These include using trigonometry, geometry, number processes and statistics within real-life contexts. The Outcomes cover aspects of these skills and also skills in reasoning.

Topics include: Trigonometry, Vectors, Fractions and Percentages, Statistics.

METHODOLOGY

Teacher led classroom management with direct teaching the prime approach. Effective use is made of ICT and online materials to aid learning including: Mymaths, Numeracy Workout, SOLAR, Scholar, TI Nspire graphic calculators. Pupils are encouraged to take ownership and responsibility for making sure tasks in school and at home are carried out effectively and that they carry out necessary revision and consolidation.

ASSESSMENT

End of Course examination (external) which will be graded A, B, C, D or Fail comprising of Paper 1 (non-calculator) worth 50 marks and Paper 2 (calculator) worth 60 marks.

Paper 1 will last 1hr 15mins and Paper 2 will last 1hr 50 mins.